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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/965,990	09/28/2001	Jerry L. Carlson	98-HSP-245	4857

200 7590 06/18/2003

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EXAMINER

VAN PELT, BRADLEY J

ART UNIT	PAPER NUMBER
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3682

DATE MAILED: 06/18/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/965,990

Applicant(s)

CARLSON ET AL.

Examiner

Bradley J Van Pelt

Art Unit

3682

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 28 April 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☒ Other: *Exhibit A*.

## **DETAILED ACTION**

### ***Information Disclosure Statement***

1. The listing of references in the specification is not a proper information disclosure statement. 37 CFR 1.98(b) requires a list of all patents, publications, or other information submitted for consideration by the Office, and MPEP § 609 A(1) states, "the list may not be incorporated into the specification but must be submitted in a separate paper." Therefore, unless the references have been cited by the examiner on form PTO-892, they have not been considered.

### ***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 1-8 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Re: claim 1, line 9, "a filter assembly disposed in series flow relationship" is inaccurate because disclosed filter assembly is in a parallel arrangement (see attachment).

The term "disc-like portion" in claims 3, 4, and 6 is a relative term, which renders the claim indefinite. The term "disc-like portion" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention.

***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 1, 6, and 7 are rejected under 35 U.S.C. 102(e) as being anticipated by Takada et al. (USPN 6,508,059) herein after Takada.

Takada disclose a hydrostatic transmission comprising a housing assembly (9), a variable displacement fluid pump (11), (see column 1, lines 17-20) and a fluid pressure operated motor (21) disposed in said housing assembly; said fluid pump including a pump inlet (92) and a pump outlet (91), and said fluid motor including a motor inlet (93) and a motor outlet (94), and said housing assembly being in fluid communication with a source of low pressure fluid, disposed within said housing assembly, said hydrostatic transmission defining a flow path including, in order, said pump inlet, said pump outlet, said motor inlet, and said motor outlet; said hydrostatic transmission further including a filter assembly (80) disposed in a flow relationship in said flow path; characterized by:

a) said housing assembly defining a recessed area (84) intersecting said flow path at a location between said source of low pressure fluid and said pump inlet, the flow area of said recessed area being substantially greater then the flow area of said flow path (see fig. 6 area 84 diverges);

b) said filter assembly comprising a piece of filter material disposed within said recessed area and attached directly thereto in a manner sufficient to maintain said piece of filter material within said recessed area during flow through said flow path;

said housing assembly including a radially-extending disc-like portion (10) disposed axially between said fluid pump and said fluid motor; said disc-like portion defining said recessed area and defining a fluid passage (82) disposed downstream of said recessed area and in fluid communication with said pump inlet;

a check valve (83) disposed in said fluid passage, the check valve is operable to permit flow through said filter assembly, then through said fluid passage and said check valve, and into said pump inlet (see diagram fig. 7).

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 2-4, and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takada in view of Woodley (USPN 5,136,854).

Takada disclose a radially extending disk-like portion (10) disposed axially between piston pump and piston motor; radially extending disc-like portion defining a first recessed area (84), a first piece of filter material (80) disposed in the first recessed area.

Takada does not disclose said fluid pump comprising a radial piston pump and said fluid pressure operated motor comprising a radial piston motor;

said housing assembly comprises a pintle assembly;  
disc-like portion of said pintle defining said recessed area;  
radially disc-like portion defining a second recessed area, and said filter assembly comprising second piece of filter material disposed in second recessed area.

Woodley shows a fluid pump comprising a radial piston pump (15) and said fluid pressure operated motor comprising a radial piston motor (17);

a housing assembly comprises a pintle assembly (35);  
a disc-like portion (65) of said pintle defining a recessed area (hole and groove leading into check valve 63).

radially disc-like portion defining first and second recessed areas (hole and groove leading into check valve 63, and recessed area counterclock-wise from hole).

To modify the apparatus of Takada so as to provide a radial piston pump and motor in combination with a pintle assembly would have been obvious to one of ordinary skill in the art in view of the teachings of Woodley that such an arrangement reduces the overall size and weight of the crankshafts in each of the pump and motor, therefore increasing the efficiency and reducing the cost of operation of the apparatus.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to use first and second pieces of filter material, since it has been held that mere duplication of the essential working parts of a device only involves routine skill in the art.

8. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Takada in view of Suzuki (USPN 6,183,526).

Takada disclose all of the instantly claimed invention according to claim 1, except said piece of filter material comprises a single piece of pleated filter paper, said piece of filter paper being attached within said recessed area by means of an adhesive material being in contact with both said piece of filter paper and said recessed area of said housing assembly.

Suzuki renders obvious said piece of filter material comprises a single piece of pleated filter paper (column 9, lines 16-17), said piece of filter paper being attached within said recessed area by means of an adhesive material (column 6, lines 36-39) being in contact with both said piece of filter paper and said recessed area of said housing assembly.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the apparatus of Takada by constructing the filter out of pleated paper and to include an adhesive for attachment to the housing, as taught by Suzuki, for the purpose of removing impurities and to prevent the filter from coming down in the housing.

### ***Response to Arguments***

9. The applicant argues “it can be seen clearly from the schematic of fig. 2 that in fact the filter assembly (81) is in a series flow relationship between the source of fluid C and the various outlets and inlets (63 and 65),” which is not claimed. The claim sets forth “a filter assembly disposed in series flow relationship in said flow path,” the claim further sets forth “said flow path including in order, said source, said pump inlet, said pump outlet, said motor inlet, and said motor outlet.” The filter assembly, however, clearly is in a parallel relationship in said flow path. Included in the action is a schematic of series and parallel relationships, as exhibit A. The illustrations in exhibit A show parallel and series diagrams. Since the oil in the instant invention is allowed to flow in more than one flow path, it is not defined as a series relationship. Until oil

is lost in the system no oil will enter from the source and the filter, because this is the case oil will not be filtered between motor and pump each and every time during operation, thus it is in a parallel relationship.

Applicant argues that the term "disc-like portion" is not a relative term. The term "like" is vague and indefinite; the metes and bounds of the claims are not clear.

Applicant's arguments with respect to prior art in view of claims 1-8 have been considered but are moot in view of the new ground(s) of rejection.

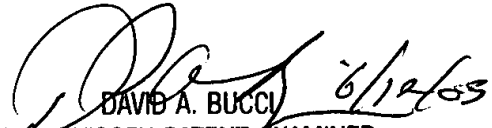
***Conclusion***

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bradley J Van Pelt whose telephone number is (703)305-8176. The examiner can normally be reached on M-Th 7:00-4:30, 2nd F 7:00-3:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David A Bucci can be reached on (703)308-3668. The fax phone numbers for the organization where this application or proceeding is assigned are (703)746-9391 for regular communications and (703)305-3597 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)308-2168.

BJVP  
June 5, 2003

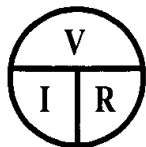
  
DAVID A. BUCCI  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 3600



## The Basics Of Ohms Law

Ohms Law lets us calculate Voltage, Resistance, and Current in simple circuits.

### Ohms Law



V = voltage  
I = current  
R = resistance

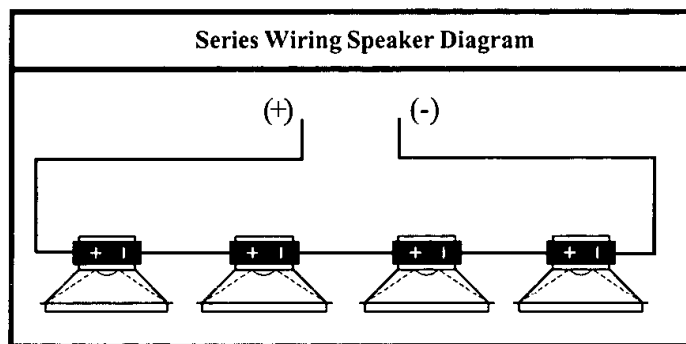
To determine V, or I, or R: cover the letter of the one you want to calculate.

V = I multiplied by R

I = V divided by R

R = V divided by I

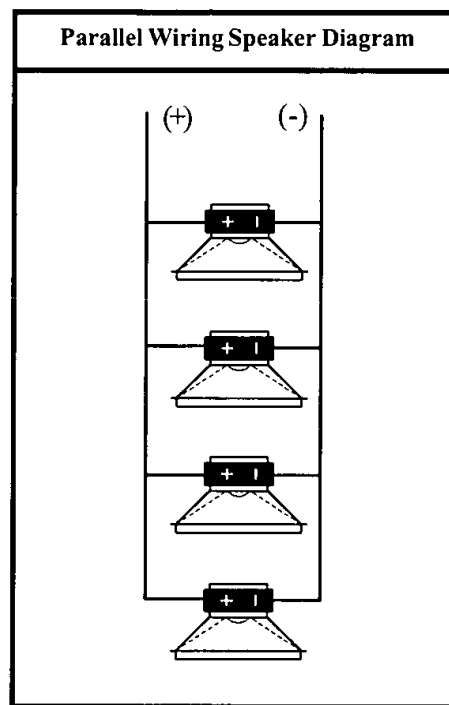
## How To Calculate The Resistance Of Series Circuits



**To Calculate The Total Resistance  
Of A Series Circuit:**

**Total Resistance** = R1 + R2 + R3 + R4 .....

## How To Calculate The Resistance Of Parallel Circuits



**To Calculate The Total Resistance  
Of A Parallel Circuit:**

**Total Resistance** = 
$$\frac{1}{\frac{1}{R1} + \frac{1}{R2} + \frac{1}{R3} + \frac{1}{R4} + \dots}$$

R1 = Resistance of speaker 1

R2 = Resistance of speaker 2

R3 = Resistance of speaker 3

R4 = Resistance of speaker 4